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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,679	08/31/2001	Minoru Tamura	040679-1342	9299

22428 7590 04/23/2003

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EXAMINER

TRAN, DALENA

ART UNIT

PAPER NUMBER

3661

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .		Applicant(s)
	09/942,679		TAMURA ET AL.
	Examin r	Art Unit	
	Dalena Tran	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 4-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Notice to Applicant(s)

1. This office action is responsive to the amendment filed on 12/30/02. Claims 1-20 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 3, and 18-20, are rejected under 35 U.S.C.102(e) as being anticipated by Kurz et al. (6,226,593).

As per claims 3 and 19-20, Kurz et al. disclose a system for controlling a stand-by braking torque applied to an automotive vehicle under a condition of approaching or following an obstacle preceding the vehicle, system comprising: an obstacle detection system for detecting a distance between the vehicle and the obstacle preceding the vehicle (see column 1, lines 41-55; and columns 3-4, lines 47-14); a braking system for application, as a stand-by braking torque, brake torque to the vehicle in response to a brake signal (see column 1, lines 56-67); a controller for determining whether or not an operator braking action to reduce the speed of the vehicle is imminent under a condition of approaching or following an obstacle preceding the vehicle based on the detected distance by the detection system and a vehicle speed of the vehicle (see column 2, lines 1-43), determining an initial value of brake torque (see column 2, lines 43-48; and

column 4, lines 13-43), determining a brake signal for the determined initial value of brake torque (see column 2, lines 49-67), applying the determined brake signal to the braking system upon determination that the operator braking action is imminent (see column 3, lines 1-34), and monitoring the brake signal based on the monitored brake torque after determination that the operator braking action is imminent (see columns 4-5, lines 42-3).

Claim 18 is method claim corresponding to system claim 3 above. Therefore, it is rejected for the same rationales set forth as above.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurz et al. (6,226,593) in view of Dillmann (5,131,268).

As per claim 1, Kurz et al. disclose a method for controlling a stand-by braking torque applied to an automotive vehicle under a condition of approaching or following an obstacle preceding the vehicle, method comprising: determining a brake signal for brake pressure to apply a brake torque, as a stand-by braking torque (see the abstract). Kurz et al. do not disclose brake torque threshold. However, Dillmann discloses establishing at least one brake torque threshold, and comparing the monitored brake torque with the established brake torque threshold (see columns 4-5, lines 65-42), monitoring the brake torque (see column 2, lines 25-45), and modifying the brake signal in response to the comparing the monitored brake torque with the

established brake torque threshold (see columns 7-8, lines 26-36). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Kurz et al. by combining brake torque threshold, comparing the monitored brake torque with the established brake torque threshold, and modifying the brake signal in response to the comparing the monitored brake torque with the established brake torque threshold for selectively apply braking torque to the front and rear wheels depending on the relationship of the desired brake torque correction and the brake torque threshold.

6. Claim 2, is rejected under 35 U.S.C. 103(a) as being unpatentable over Kurz et al. (6,226,593), and Dillmann (5,131,268) as applied to claim 1 above, and further in view of Hiwatashi (6,056,374).

As per claim 2, Kurz et al., and Dillmann do not disclose detecting pressure of the hydraulic brake fluid at a first and second location. However, Hiwatashi discloses detecting pressure of the hydraulic brake fluid at a first and second location within the braking system to generate a first and second output signal indicative of the detected pressure at the first and second location (see the abstract; columns 1-2, lines 63-17; and columns 4-5, lines 41-65), and processing the first and second output signals to provide at least one variable expressing one of characteristics of the brake torque (see columns 6-7, lines 23-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teach of Kurz et al., and Dillmann by combining detecting pressure of the hydraulic brake fluid at a first and second location within the braking system to generate a first and second output signal indicative of the detected pressure at the first and second location, and processing the first and second output signals to provide at least one variable expressing one of characteristics of the brake

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torque to accurate control braking of vehicle depend on the relationship of the obstacle in front of vehicle.

7. Claims 4-17, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Remarks

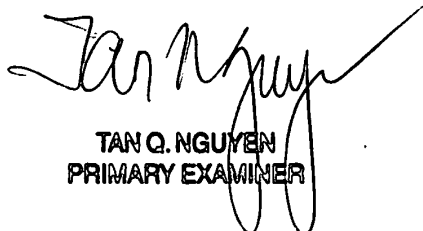
8. Applicant's argument filed on 12/30/02 has been fully considered and they are deemed to be persuasive. However, upon updated search, the new ground of rejection has been set forth as above.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dalena Tran whose telephone number is 703-308-8223. The examiner can normally be reached on M-F (7:30 AM-5:30 PM), off every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on 703-308-3873. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

/dt
April 18, 2003


TAN Q. NGUYEN
PRIMARY EXAMINER